## **Ensuring the Equitable Decarbonization of Buildings**

Studies continue to show that the impacts of local air pollution and global climate change disproportionately affect low-income communities as well as communities of color, regardless of income. Black and Latinx populations are exposed to higher levels of toxic air pollution and, as a result, suffer from higher rates of cardiovascular disease. As an example, the newly released Los Angeles County Department of Public Health Climate Change & Health Equity Report states that one in four Black children in Los Angeles are afflicted with asthma, which is more than triple the rate in white children. Just last year, the County's Chief Sustainability Office (CSO) released a comprehensive Climate Vulnerability Assessment showing that, while 50% of the County's population is Hispanic/Latinx, this population comprises 67% of the people in communities that have a high vulnerability to extreme heat.

Residential and commercial buildings are among the most significant sources of both local air pollution and greenhouse gases. The South Coast Air Quality

Management District (SCAQMD) has indicated that residential and commercial buildings are the largest stationary source of emissions of nitrogen oxides (NOx) which

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is a key component of ozone. To meet the federal health-based standard for ozone, the region needs to reduce NOx emissions 70% by 2037. The SCAQMD also reports that commercial cooking and residential natural gas combustion are a larger source of fine particulate (PM2.5) in the region than all cars and trucks combined. Similarly, buildings are the second largest source of greenhouse gas emissions in the County after transportation. So, to meet our local air pollution reduction goals and our climate goals, it is imperative that we reduce emissions from the building sector.

The Board of Supervisors (Board) has taken a significant step forward by changing the default electrical energy mix for residents and business in unincorporated Los Angeles County to 100% renewable energy through the Clean Power Alliance. However, the use of natural gas in residential and commercial buildings continues to be a major source of indoor and ambient air pollution and greenhouse gases. Recent studies have shown that natural gas-burning stoves and furnaces produce a number of dangerous pollutants, including particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), and formaldehyde. As a result, studies have shown that children in homes that use natural gas have a 42% higher risk of experiencing asthma symptoms and are 24% more likely to be diagnosed with lifetime asthma.

Over fifty cities and counties in California have already adopted building codes to reduce or eliminate the use of natural gas in new construction and some jurisdictions have begun enacting policies to address natural gas use in existing buildings. The Board recently adopted a motion calling for a report on Zero Net Energy standards for new large-scale developments. This type of policy can and should be expanded to cover all new construction regardless of scale. Additionally, the Department of Public Works (DPW) is now developing an existing building energy and water use reporting ordinance that will allow the County to collect data to inform future

policymaking.

Equipment such as electric heat-pumps are more efficient than combustion-based equipment, less costly to operate, and filter indoor air, providing protection from wildfire smoke or other ambient air pollution. And, because they provide both heating and cooling, heat pumps can provide air conditioning in low-income households which may not have had, or could not afford, traditional air conditioning equipment. This will be increasingly important as we face longer, more severe, and more frequent heat storms. As pointed out by the County's recent Climate Vulnerability Assessment, it is low-income communities and communities of color that will be disproportionately impacted by extreme heat.

To ease this transition, financial incentives to replace gas-fired equipment such as space and water heaters, cooktops, and other appliances should be among the first approaches used to begin this market transformation. The County should identify state and federal funding that may be available and work with local electric utilities such as Southern California Edison and the Clean Power Alliance to support these efforts.

Recently, the City of Los Angeles adopted a motion to set out a process for considering policies to address these issues in a way that protects low-income utility customers, supports workers that may be affected by such policies, and prevents unintended consequences for tenants related to housing affordability and availability, informed by recommendations from two recent reports by Strategic Actions for a Just Economy (SAJE) and Inclusive Economics. These reports pointed to the centrality of tenant protections and family-sustaining jobs for any building decarbonization policy. The City's motion directs that communities that have suffered from historic and ongoing burdens of racist policies and practices be centered in the development of a building decarbonization program to ensure environmental, energy,

and housing justice. The County should be part of any such discussions with these communities as well as with stakeholders from the building sector, labor, tenant rights organizations, and communities throughout unincorporated Los Angeles County as it begins consideration of similar policies.

Additionally, as policies to phase out the use of dirty fossil fuels are developed, government agencies must be mindful of ensuring the resiliency of our energy system in the face of a changing climate. The Board has recently moved to create a Climate Resilience Initiative and that office must be engaged in these efforts to ensure ongoing supply and reliability of energy for residents and businesses.

## **WE, THEREFORE, MOVE** that the Board of Supervisors:

- Direct the Chief Sustainability Office, in collaboration with the Climate
   Resilience Initiative in the Chief Executive Office, the Departments of Public
   Works, Regional Planning, and others, to:
  - a) initiate and/or participate in ongoing stakeholder engagement processes, such as those led by the City of Los Angeles and those recommended in the California Equitable Home Electrification Program, that include environmental and environmental justice advocates, tenant rights organizations, housing advocates, the affordable housing development community, the building industry, labor unions, utilities, town councils, and others on approaches to decarbonizing new and existing buildings in a way that that protects low-income utility customers, that supports workers that may be affected by such policies, that prevents unintended consequences on housing affordability and availability, and that ensures the resiliency of our energy system;

- b) engage with state and federal agencies, electric utilities, advocates, academics, and others to determine the extent to which the increased electric demand resulting from efforts to decarbonize buildings can be met with existing and planned new clean energy resources and steps necessary to strengthen the electricity transmission and distribution system to ensure these energy supplies can be delivered reliably;
- c) proactively advocate for and seek state and federal funding to support efforts to decarbonize existing buildings and ensure adequate energy supplies and grid resilience; and
- d) report back to the Board within 120 days on potential policies and programs, including funding sources, to reduce or eliminate the use of fossil fuels in existing residential and commercial buildings; and .
- 2. Direct the Department of Public Works, in consultation with the County's Chief Sustainability Office, the Department of Regional Planning, the Los Angeles County Fire Department, and other relevant departments to report back within 120 days with recommendations for an ordinance or building code changes that would phase out the use of natural gas equipment and appliances in all new residential and commercial construction and substantial renovations, where feasible, starting in 2023.
- 3. Delegate authority to the Executive Office of the Board to enter into any contracts or agreements necessary to support the Chief Sustainability Office in its efforts to conduct stakeholder engagement, assess electricity supply and grid reliability, and/or seek out and apply for state and federal funds.